

Notice of Allowability

Application No.

10/509,020

Examiner

Thuy V. Tran

Applicant(s)

MINAKOV, VALERIY IVANOVICH

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/23/2004.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 092805.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 09/23/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

THUY V. TRAN
PRIMARY EXAMINER

DETAILED ACTION

This is a response to the Applicant's filing on 09/23/2004. In virtue of this filing, claims 1-8 are currently presented in the instant application.

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The Examiner's amendment is made to correct the typographical errors in the claims to improve antecedent basis, and to update the related data in the specification for clarity. Such corrections are believed not to affect the scope of the claimed invention.

The amendment appears in the record as follows:

- *In the Specification:*

Page 1, below the title "PLASMA ELECTRON-EMITTING SOURCE" and before the heading "Field of Application", insert --This Application is a national stage application filing under 35 U.S.C. 371 of International Application No. PCT/RU03/00084 filed 03/07/2003, which claims priority from Russian Federation Application No. 2002107468 filed 03/26/2002.--;

- *In the Claims:*

Claim 1, line 7, "the" (first occurrence) has been deleted;

Claim 1, line 14, "the" (first occurrence) has been changed to --a--;

Claim 3, line 2, "the" (first occurrence) has been deleted;

Claim 3, line 6, "the" has been changed to --a--;

Claim 3, line 7, "the" (first occurrence) has been changed to --a--;

Claim 5, line 3, "the" (second occurrence) has been changed to --an--;

Claim 5, line 4, "the" (first and second occurrences) has been changed to --a--;

Claim 5, line 5, "the" (second occurrence) has been changed to --a--;

Claim 5, line 7, "the" (first occurrence) has been changed to --an--;

Claim 5, line 8, "the" (second occurrence) has been changed to --a--; and

Claim 8, line 4, "the" (first occurrence) has been changed to --a--.

Allowable Subject Matter

2. Claims 1-8 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or fairly suggest a plasma electron source having a function of a cathode for a gaseous discharge apparatus characterized in that the intermediate anode, the inner pole piece, the main anode, and the outer pole piece are installed successively between and in line with the outlets of the cathode and housing; in that the main anode is made of a magneto-weak material and positioned so that at least 30% of the magnetic flux created in a space between the pole pieces flows through its hole; and in that the inner and outer pole pieces are electrically connected with the cathode, in combination with the remaining claimed limitations as called for in independent claim 1 (claims 2-8 are allowed since they are dependent on claim 1).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation of relevant prior art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Hilliard (Pub. No.: US 2003/0161969 A1) discloses an electron-assisted deposition process and apparatus.

Prior art Kaufman et al. (U.S. Patent No. 6,750,600 B2) discloses an ion source.

Prior art Aston (U.S. Patent No. 5,646,476) discloses an ion source.

Prior art Saito et al. (U.S. Patent No. 5,041,732) discloses a charge particle beam generating apparatus.

Prior art Lejeune et al. (U.S. Patent No. 4,782,235) discloses an ion source.

Comments on drawings submitted on 09/23/2004

5. Figs. 1 and 2 contain labels written in foreign language. These labels must be corrected as FIG. 1 and FIG. 2 correspondingly for each figure.

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on 09/23/2004 is not fully in compliance with the provisions of 37 CFR 1.98. Accordingly, the information disclosure statement is partially considered by the examiner.

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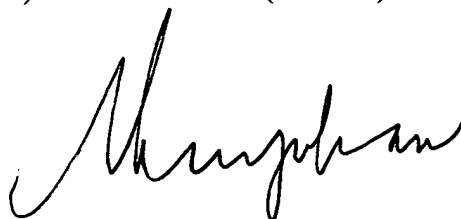
Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

09/28/2005



THUY V. TRAN
PRIMARY EXAMINER